

# **Executive Summary**

As part of a public outreach initiative, the Energy and Environment Cabinet held three public listening sessions to allow interested parties to submit comments concerning oil and gas development in the Commonwealth.

The sessions were held on July 7, 2015 at Madisonville Community College in Madisonville, on July 23, 2015 at the Center for Rural Development in Somerset, and on July 30, 2015 at Hazard Community College in Hazard. The cabinet also accepted electronic comments from July 7<sup>th</sup> through July 31<sup>st</sup>.

This report summarizes the comments the Cabinet received from concerned citizens, environmental groups, and industry representatives from across the Commonwealth. A total of 150 people attended the sessions: 19 in Madisonville, 63 in Somerset, and 68 in Hazard. From July 7<sup>th</sup> to July 31<sup>st</sup>, 778 individuals submitted comments electronically via email.

The comments received at the sessions and the comments submitted via electronic submittal centered on the same issues. Some of those issues include: a moratorium or ban on hydraulic fracturing; water contamination from oil and gas operations; air pollution from oil and gas operations; health issues surrounding oil and gas operations; social issues caused by hydraulic fracturing; increasing renewable energy usage; increased incidence of earthquakes from hydraulic fracturing; pipeline safety; water usage in the hydraulic fracturing process; and other issues that will be mentioned in the body of the report.

The Cabinet will distribute this report to the Governor's Office, leadership in the General Assembly, the Oil and Gas Workgroup, and the public.

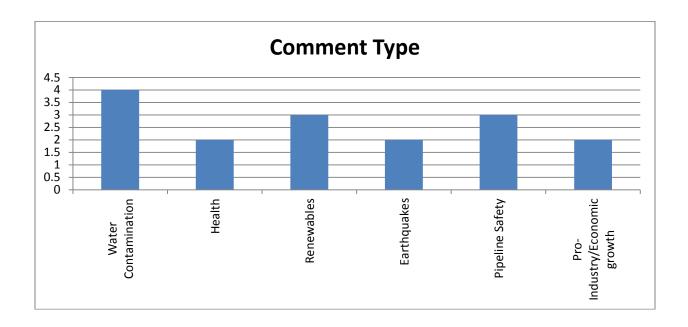
### Madisonville Session

The first public listening session took place on July 7, 2015 at Madisonville Community College in Madisonville, Kentucky. It lasted approximately 45 minutes with 9 speakers and 19 people registered in attendance. Groups represented included the Kentucky Oil and Gas Association, the Pennyrile Group of the Sierra Club, and individual citizens.

- Commenters were concerned they had no knowledge of the chemicals used in the fracking process.
- Concern was expressed that the injection of fluids into the earth in the fracking process resulted in increased seismic activity. This issue was of special concern pertaining to fracking in the proximity of the New Madrid Fault.
- Transportation of products from oil and gas sites and the possibility of pipeline failures was a significant concern.
- Citizens were concerned with the possibility of contaminating surface and underground sources of water associated with the hydraulic fracturing process.
- Some commenters were concerned that oil and gas companies would infringe on property rights of surface owners. One commenter suggested that a process to solve disputes is needed and a requirement to provide proof of mineral ownership.
- Some commenters believed that SB 186 fell short of the statutory requirements needed to protect citizens from the impacts of fracking.
- Commenters stated that rather than allowing fracking to occur in Kentucky, an investment should be made into renewable energy (Solar/Wind).
- Comments were made that fracking and the increased natural gas and oil produced from the process would provide greater energy security for the Commonwealth and the nation.
- Hydraulic fracturing on deep horizontal wells will provide more jobs for local communities.
- The oil and gas industry has a \$1.1 billion dollar economic impact.

The following data represents comment data that was received at the Madisonville listening session.

Comment Type		Number of Comments
Water Contamination		4
Health		2
Increase Use of Renewables		3
Earthquakes		2
Pipeline Safety		3
Pro-Industry/Economic growth		2
	Total	16



# **Somerset Session**

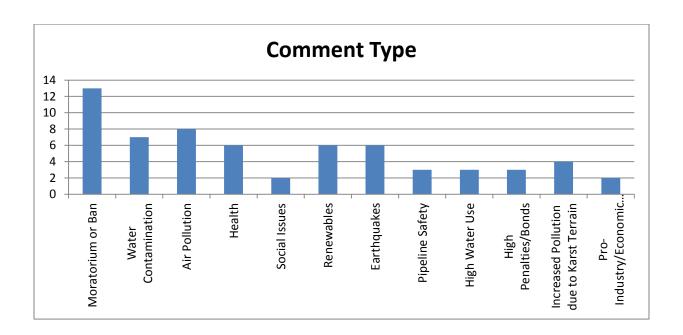
The second listening session took place on July 23, 2015 at the Center for Rural Development in Somerset, Kentucky. It lasted approximately 2 hours with 30 speakers and 63 registered people in attendance\*. Groups represented included the Kentucky Oil & Gas Association, Kentuckians for the Commonwealth, Kentucky Environmental Foundation, and individual citizens.

- Most individual citizens called for a moratorium on hydraulic fracturing until more studies on the environmental impacts can be completed. Some asked for a complete ban on the practice.
- Concern was expressed that hydraulic fracturing would release radon gas causing a public health concern for area residents.
- Transportation of products from oil and gas sites and the possibility of pipeline failures was a significant concern.
- There was concern that the hydraulic fracturing process increased rates of cancer and respiratory illness due to the release of radon and gases.
- Citizens commented that oil and gas production is known to create harmful emissions that can affect the nervous, respiratory and immune systems.
- Concern was expressed that the injection of fluids into the earth in the hydraulic fracturing process causes increased seismic activity (earthquakes).
- Citizens were concerned with the possibility of contaminating surface and underground sources of water associated with the hydraulic fracturing process.
- Hydraulic fracturing uses large amounts of water during the fracturing process. Citizens
  were concerned that this would place a large strain on local water resources especially in
  isolated communities where it may be difficult to transport sufficient amounts of water
  for fracturing.
- Oilfield jobs may be created by a more robust oil and gas industry in Kentucky but they are dangerous.
- Water that is produced from the hydraulic fracturing process is considered a waste and should be disposed of in an environmentally responsible manner.
- The Division of Oil and Gas needs better tools for enforcement, increased penalties, and fines.
- Currently, the Division of Oil and Gas is underfunded and should receive increased funding.
- Some believed that SB 186 fell short of the statutory requirements needed to protect citizens from the impacts of fracking.
- Hydraulic fracturing and increased drilling activity is destructive to road systems, especially rural roads where many oil and gas wells are located.
- Citizens were concerned that increased activity and oilfield jobs could bring in individuals to work that are not from the local area and are not vested in the community. This could lead to a higher instance of unwanted social issues.
- Comment was made that hydraulic fracturing is heavily regulated with the passage of SB 186 as well as current water statutes and regulations currently in effect.

- The oil and gas industry has a \$1.1 billion dollar economic impact.
- Rather than allowing fracking to occur in Kentucky, an investment should be made into renewable energy (Solar/Wind).

The following data represents comment data that was received at the Somerset listening session.

Comment Type	Number of Comments
Moratorium or Ban on Fracking	13
Water Contamination	7
Air Pollution	8
Health	6
Social Issues	2
Renewables	6
Earthquakes	6
Pipeline Safety	3
High Water Use	3
High Penalties/Bonds	3
Increased Pollution due to Karst Terrain	4
Pro-Industry/Economic growth	2
Т	otal 63



<sup>\*</sup>It was apparent that more than 63 people attended the session. Some of the attendees did not register.

### **Hazard Session**

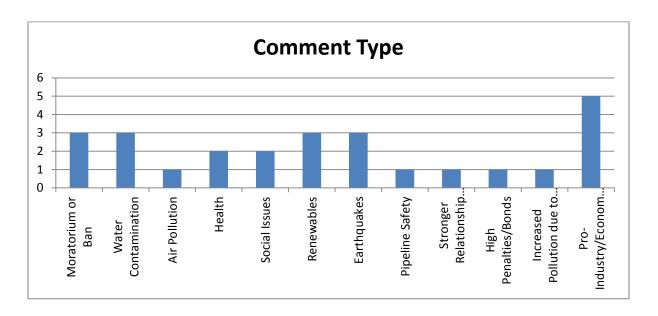
The third listening session took place on July 30, 2015 at Hazard Community College in Hazard, Kentucky. The session lasted approximately 1.5 hours with 17 speakers and 68 registered people in attendance. Groups represented included the Kentucky Oil & Gas Association, Kentucky Waterways Alliance, Kentuckians for the Commonwealth, members of the Kentucky General Assembly, local officials, and individual citizens.

- Concern was expressed that the injection of fluids into the earth in the hydraulic fracturing process causes increased seismic activity.
- Citizens were concerned that increased activity and oilfield jobs could bring in individuals to work that are not from the local area and are not vested in the community. This could lead to a higher instance of unwanted social issues.
- Increased drilling activity will continue the use of fossil fuels well into the future. Citizens commented that the continuing use of fossil fuels in a carbon constrained world is the wrong direction for the Commonwealth and could make climate change worse.
- Hydraulic fracturing and increased drilling activity is destructive to road systems, especially rural roads where many oil and gas wells are located. Also, truck traffic in these areas will increase dust and noise pollution.
- Kentucky is unique in its geologic structure due to its karst topography. Citizens were concerned that the karst topography will increase the chance of water contamination.
- Hydraulic fracturing on deep horizontal wells will provide more jobs for local communities.
- The oil and gas industry has a \$1.1 billion dollar economic impact.
- Comment was made that the Commonwealth didn't need to sacrifice environmental protection for economic gain.
- Some believed that SB 186 fell short of the statutory requirements needed to protect citizens from the impacts of fracking.
- A request was made of the cabinet to pursue only common sense regulation that accomplished a balance of environmental protection and economic gain for the Commonwealth.
- The Commonwealth needs to maintain affordable energy in order to maintain current businesses as well as luring new business
- Fracking and the increased natural gas and oil produced from the process would provide greater energy security for the commonwealth and the nation.
- Fracking is not new to Kentucky. It has a 60+ year history in the state, most of which has been nitrogen based fracturing.
- Baseline regulation is already in place that will protect the environment.
- Baseline water testing is currently in place due to the passage of SB 186.
- Some commenters believe SB 186 was a great piece of legislation.
- The local economy is struggling with loss of coal jobs. Increased drilling activity not only can provide badly needed jobs to the region but also help maintain low energy costs.
- Rather than allowing fracking to occur in Kentucky, an investment should be made into renewable energy (Solar/Wind).

- The cabinet should require onsite spill control.
- The cabinet should require full disclosure of the chemical constituents used in the hydraulic fracturing process.
- Owners and operators should be required to perform site reclamation when the drilling process is completed.
- The cabinet should institute burdensome penalties to prevent oil and gas operators from breaking current laws.

The following data represents comment data that was received at the Hazard listening session.

Comment Type		Number of Comments
Moratorium or Ban on Fracking		3
Water Contamination		3
Air Pollution		1
Health		2
Social Issues		2
Renewables		3
Earthquakes		3
Pipeline Safety		1
Stronger Relationship Between DOG/DOW		1
High Penalties/Bonds		1
Increased Pollution due to Karst Terrain		1
Pro-Industry/Economic growth		5
	Total	26



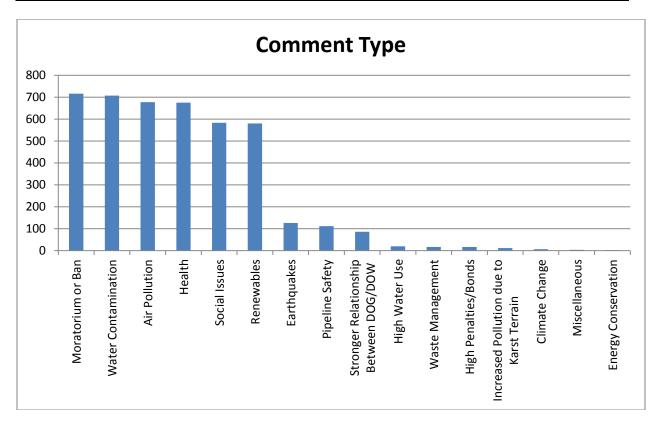
# **Electronic Comments**

The Cabinet established an email account to receive comments from people that could not attend the hearing and those who wished to follow up their verbal comments with electronic copies. The Cabinet received 778 emails with multiple comments in each email. The comments were submitted by individuals, Kentucky Waterways Alliance, and Food and Water Watch. The emails were categorized by subject matter into the following categories.

- Most citizens called for a moratorium on hydraulic fracturing until more studies on the environmental impacts can be completed. Some asked a complete ban on the practice.
- Citizens were concerned with the possibility of contaminating surface and underground sources of water associated with the hydraulic fracturing process.
- Citizens commented that oil and gas production is known to create harmful emissions that can affect the nervous, respiratory and immune systems.
- Concern was expressed that hydraulic fracturing would release radon gas causing a public health concern for area residents.
- Citizens were concerned that increased activity and oilfield jobs could bring in individuals to work that are not from the local area and are not vested in the community. This could lead to a higher instance of unwanted social issues.
- Rather than allowing fracking to occur in Kentucky, an investment should be made into renewable energy (Solar/Wind).
- Concern was expressed that the injection of fluids into the earth in the hydraulic fracturing process causes increased seismic activity (earthquakes).
- Transportation of products from oil and gas sites and the possibility of pipeline failures were significant concerns.
- Some citizens commented that a stronger relationship should exist between DOG and DOW
- Hydraulic fracturing uses large amounts of water during the fracturing process. Citizens
  were concerned that this would place a large strain on local water resources, especially in
  isolated communities where it may be difficult to transport sufficient amounts of water
  for fracturing.
- Drilling and extracting oil and gas produces large amounts of waste. This waste needs to be managed in the proper manner in accordance with existing waste management administrative regulations.
- The cabinet should institute burdensome penalties to prevent oil and gas operators from breaking current laws. This should also be coupled with high bonding rates to cover costs of reclamation if necessary.
- Kentucky is unique in its geologic structure due to its karst topography. Citizens were concerned that the karst topography will increase the chance of water contamination.
- Increased drilling activity will continue the use of fossil fuels well into the future. Citizens commented that the continuing use of fossil fuels in a carbon constrained world is the wrong direction for the Commonwealth and could make climate change worse.
- Energy conservation should be part of Kentucky's energy plan for the future.

The following data represents comment data that was received through the email address set up by the cabinet.

Comment Type	Number of Comments
Moratorium or Ban on Fracking	716
Water Contamination	707
Air Pollution	677
Health	675
Social Issues	583
Renewables	580
Earthquakes	126
Pipeline Safety	112
Stronger Relationship Between DOG/DOW	86
High Water Use	20
Waste Management	17
High Penalties/Bonds	17
Increased Pollution due to Karst Terrain	12
Climate Change	7
Miscellaneous	4
Energy Conservation	2
	Total 4341



# **Summary**

The listening sessions provided the public with an opportunity to express concerns and thoughts about oil and gas development in Kentucky. The Cabinet heard or received written comments from 834 individuals throughout the state interested in this topic. The chart and graph below combines the comments received electronically and those received at the public meetings.

This report will be circulated to the Administration, General Assembly, and the Oil and Gas Workgroup. It will assist in providing direction for the further development and updating of the oil and gas regulatory framework in Kentucky.

Comment Type		Total Comments
Moratorium or Ban on Fracking		732
Water Contamination		721
Air Pollution		686
Health		685
Social Issues		587
Renewables		592
Earthquakes		137
Pipeline Safety		119
Stronger Relationship Between DOG/DOW		87
High Water Use		23
Waste Management		17
High Penalties/Bonds		21
Increased Pollution due to Karst Terrain		17
Climate Change		7
Miscellaneous		4
Energy Conservation		2
Pro-Industry/Economic growth		9
	Total	4446

